U.S. Department of Commerce
BEA
Bureau of Economic Analysis

Input-Output Accounts

The Bureau of Economic Analysis prepares the input-output accounts for the United States. These accounts show how industries interact; specifically, they show how industries provide input to, and use output from, each other to produce gross domestic product. These accounts provide detailed information on the flows of the goods and services that make up the production processes of industries.

The Bureau prepares both benchmark and annual input-output accounts. The benchmark accounts are based on detailed data from the economic censuses that are conducted every 5 years by the Bureau of the Census, and they are published at the summary level for 134 industries and at the detailed level for 491 industries. The annual accounts are prepared for selected years between the benchmarks; these accounts are based on less comprehensive data than the data from the censuses, and they are published at the summary level.

The accounts are presented in six tables—a make table, a use table, a direct requirements table, and three total requirements tables.

The make table shows the commodities that are produced by each industry. The use table shows the inputs to industry production and the commodities that are consumed by final users (for example, see the table).

The four requirements tables are derived from the make and the use tables. The direct requirements table shows the amount of a commodity that is required by an industry to produce a dollar of the industry's output. The three total requirements tables show the production that is required, directly and indirectly, from each industry and each commodity to deliver a dollar of a commodity to final users.

In addition, the benchmark accounts also include tables that present more detailed information. For example, one table provides a bridge between the categories of expenditures for private equipment and software in the national income and product accounts (NIPA's) and the commodities in gross private fixed investment in the input-output accounts, and another table reconciles the estimates of exports and imports in the input-output accounts with those in the NIPA's.

Uses of the accounts

The input-output accounts can be used to study industry production or as a framework for preparing other economic statistics. The accounts are an important tool for analysis because they show the production functions of individual industries and the interactions among producers and between producers and final users in the economy.

Specifically, these accounts can be used

- To estimate the direct and indirect effects of changes in final uses on industries and commodities; for example, to estimate the effects of a strike or a natural disaster on the economy or, supplemented with additional information, to estimate the effects of an increase in U.S. exports on employment
- To provide detail that is essential in determining weights for price indexes, such as the producer price index that is compiled by the Bureau of Labor Statistics, and for quantity indexes, such as the quantity index for gross domestic product by industy compiled by the Bureau of Economic Analysis
- To provide the basis for benchmarking the national income and product accounts every 5 years
- To provide a framework and data for the preparation of other economic statistics, such as the transportation satellite accounts and the travel and tourism satellite accounts, both of which are prepared by the Bureau

Availability

For more detailed information, see the following articles that were published in the SURVEY OF CURRENT BUSINESS, the monthly journal of the Bureau.

- "Benchmark Input-Output Accounts of the United States, 1997" (December 2002)
- "A Preview of the 1997 Benchmark Input-Output Accounts: New Detailed and Summary Industries" (August 2002)
- "Annual Input-Output Accounts of the U.S. Economy, 1998" (December 2001)
- "Investment in New Structures and Equipment in 1992 by Using Industries" (December 1998)
- "Benchmark Input-Output Accounts for the U.S. Economy, 1992: Requirements Tables" (December 1997)
- "Benchmark Input-Output Accounts for the U.S. Economy, 1992: Make, Use, and Supplementary Tables" (November 1997)

The 1997 benchmark accounts use a new classification system that is based on the North American Industry Classification System (NAICS); the 1992 benchmark accounts are based on the Standard Industrial Classification (SIC).

The annual accounts for 1997, 1998, and 1999 are based on the SIC; they are consistent with the 1999 comprehensive revision of the national income and product accounts, but they are not benchmarked to the NAICS-based estimates for 1997. The 1999 annual accounts were released in December 2002.

For more information

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The articles are available on our Web site at <www.bea.gov>. The estimates are also available on our Web site in free interactively accessible files and in free downloadable files.

The Use of Commodities by Industry Aggregates for 1999

[Millions of dollars at producers' prices]

	Industries[1]										Final uses (gross domestic product)							Total commodity output[3]
	Agriculture	Mining	Construction	Manufacturing	Transportation, communication, and utilities	Trade	Finance, insurance, and real estate	Services	Other[2]	Total intermediate use	Personal consumption expenditures	Private fixed investment	Changes in private inventories	Exports of goods and services	Imports of goods and services	Government consumption expenditures and gross investment	Gross domestic product[3]	
Commodities[1]																		
Agricultural products	67,179	87	6,486	139,679	191	4,775	13,464	12,070	651	244,583	36,315		–862	17,788	–23,548	2,948	32,640	277,223
Mining	348	31,951	7,560	102,449	58,919	31	5	30	3,337	204,630	110	859	491	6,319	–61,927	–81	–54,230	150,401
Construction	3,232	4,082	846	29,043	53,881	13,635	65,611	28,956	27,259	226,544		612,884		69		226,876	839,829	1,066,373
Manufactured products	48,321	15,400	316,212	1,410,342	77,978	109,898	20,481	321,771	17,372	2,337,774	1,158,419	633,253	53,662	529,536	–920,601	223,370	1,677,639	4,015,413
Transportation, communication, and utilities	13,253	12,204	26,700	189,446	219,281	76,342	57,983	119,980	21,694	736,882	461,983	20,528	1,719	69,375	–15,952	79,711	617,365	1,354,247
Trade	14,602	3,682	88,143	243,338	18,701	41,944	5,496	70,772	2,731	489,408	950,830	116,754	6,943	71,451	19,182	24,817	1,189,977	1,679,385
Finance, insurance, and real estate	19,250	37,582	16,122	74,092	43,295	119,886	454,962	247,877	7,333	1,020,399	1,461,735	56,299		72,876	–3,349	39,307	1,626,867	2,647,267
Services	9,826	6,541	111,242	262,398	162,462	246,647	211,945	552,838	14,264	1,578,163	2,122,946	190,454	153	44,211	–8,938	16,903	2,365,728	3,943,891
Other[2]	178	31	1,122	15,440	3,570	11,899	25,203	24,717	2,929	85,089	4,474	–53,837	–2,605	98,113	–7,619	1,014,752	1,053,278	1,138,367
Noncomparable imports	67	2,052		25,786	22,106	8,685	9,014	5,873	1,189	74,771	49,705				–136,873	12,397	–74,771	
Total intermediate inputs	176,256	113,612	574,432	2,492,012	660,384	633,742	864,165	1,384,883	98,757	6,998,243								
Value added[4]	103,000	48,145	491,941	1,617,034	672,056	1,187,230	1,821,347	2,195,714	1,137,858								9,274,323	
Total industry output[3]	455,512	275,368	1,640,805	6,601,059	1,992,823	2,454,714	3,549,677	4,965,480	1,335,372		6,246,517	1,577,194	59,500	909,737	–1,159,626	1,641,000		16,272,566

1. The input-output (I-O) accounts use two classification systems, one for industries and another for commodities, but both systems generally use the same I-O codes and titles.
2. "Other" consists of government enterprises, general government industry, household industry, and the inventory valuation adjustment.
3. The details may not sum to totals because of rounding.
4. Value added consists of compensation of employees, indirect business tax and nontax liability, and "other value added," which consists of the following components of gross domestic income: Consumption of fixed capital, net interest, proprietors' income, corporate profits, rental income of persons, business transfer payments, and "subsidies less current surplus of government enterprises."